Alexithymia

Vingerhoets, A.J.J.M.; Van Heck, G.L.M.; Grim, R.; Bermond, B.

Published in:
Psychotherapy and Psychosomatics

Publication date:
1995

Regular Article

Psychother Psychosom 1995;64:32–42

Ad J.J.M. Vingerhoets[a]
Guus L. Van Heck[a]
Rob Grim[a]
Bob Bermond[b]

[a] Department of Psychology, Tilburg University, Tilburg,
[b] Department of Psychology, University of Amsterdam, The Netherlands

Alexithymia: A Further Exploration of Its Nomological Network

Key Words
Alexithymia
Coping
Personality
Homesickness
Love styles
Temperament
Self-reported health

Abstract
The present studies were designed in order to obtain a better understanding of the nomological network of the alexithymia concept. In study I, the links between alexithymia, coping, and self-rated health were explored. As predicted, strong negative correlations were found between alexithymia and the expression of emotions, daydreams and fantasies, and planful and rational actions. Contrary to expectations, no clear associations were found with self-reported health status. In study II, the focus was on links with personality, temperament, and self-reported (susceptibility to) homesickness. Although some correlations reached statistical significance, all were rather modest. The most remarkable finding was the independence of alexithymia and neuroticism. In study III, the associations between alexithymia and aspects of love experiences were examined, again yielding low correlations. It is concluded that alexithymia is relatively independent of temperament and personality. In addition, it is suggested that the association between alexithymia and the experience of positive emotions deserves further exploration.

Introduction

Since the introduction of the term 'alexithymia', meaning 'no words for mood', this construct has been increasingly recognized by clinicians and researchers as being relevant to (the development of) a variety of medical, psychosomatic, and psychiatric disorders [1–10]. The most salient clinical elements are the following: (1) a limited ability to describe

Ad J.J.M. Vingerhoets
Department of Psychology
Tilburg University
PO Box 90.153
NL–5000 LE Tilburg (The Netherlands)

0033–3190/95/
0641–0032$8.00/0

emotions verbally; (2) an impoverished dream and fantasy life; (3) concrete and mundane speech and thought, closely tied to external events; (4) descriptions of physical symptoms rather than emotions; (5) difficulty recognizing inner affect or bodily sensations, and (6) an inability to use such feelings and sensations as signals of emotional stress.

Alexithymic characteristics have been reported to be present in patients with somatoform disorders, psychogenic pain disorders, substance use disorders, eating disorders, posttraumatic stress disorders, masked depressions, character neuroses, and sexual perversions. It has also been suggested that alexithymia is associated with lower socioeconomic class, increasing age, and masculinity [2–7]. However, the research group of Taylor failed to find any association between alexithymia, as measured by the Toronto Alexithymia Scale (TAS), with socioeconomic status [5, 9].

Nowadays, there is a voluminous literature concerning alexithymia that covers the relationships with a diversified assortment of variables. However, after critically reviewing this bulky literature, we feel that some gaps in the present knowledge can be identified that prevent having a full understanding of alexithymia.

First, by definition, alexithymics have difficulty expressing their emotions *verbally*. Nevertheless, hardly any reports are available about the *nonverbal* modes of emotional expression, for example, crying and facial expressions. We have already addressed the first issue in an earlier study [11] in which it was shown that alexithymia was negatively associated with self-reported weeping frequency. Thus, normal individuals, scoring high on an alexithymia questionnaire, not only express emotions verbally to a lesser extent compared with low-alexithymic individuals, they also report to cry less frequently. Unfortunately, data on other nonverbal modes of expressing emotions, such as facial expressions, are also very rare, in spite of the fact that the ability to pose facial expressions is central to the phenomenon. Exceptions are the study by McDonald and Prkachin [12], in which it was found that alexithymic subjects have a deficit in spontaneous displays of negative affect, and the investigation by Parker et al. [13] on the recognition of facial expression of emotions. The latter study also yielded some evidence that alexithymia is accompanied by deficits in the perception of nonverbal emotion.

A second issue that has not received due attention concerns the *valence* of the emotion. Nearly always, the inability to (verbally) express emotions has been illustrated with *negative* emotions. Hardly any attention has been paid to *positive* emotions, such as joy, love, or gratitude. To our knowledge, only Bagby et al. [14] have recently reported that the TAS-20 is negatively related to the positive emotions facet of the extraversion dimension, suggesting a reduced ability to experience pleasurable emotions. Prince and Berenbaum [15] have addressed this issue, when exploring the relationship between alexithymia and hedonic capacity, i.e., the capacity to experience pleasure. Their results demonstrated a significant negative association between alexithymia and the capacity to experience pleasure in social situations. In contrast, these investigators failed to find an association between alexithymia and the capacity to experience pleasure in physical situations. Since positive emotions such as love are crucial in attachment processes, the formation of intimate bonds and, indirectly, in the availability of emotional support, it is of utmost importance to gain more insight into the relation between alexithymia and this particular type of emotion. In this context, intriguing questions that deserve the attention of researchers are, for instance: do alexithymic subjects also have less experi-

ences of being in love, love at first sight, and passion?

Third, it would be interesting to know more about the association with *homesickness*, because predictions about the direction of an association are hard to make. On the one hand, it may be speculated that the dysphoric mood state associated with homesickness would probably have the effect of inflating the correlation with alexithymia [16, 17], but at the same time people who are homesick have to identify their sadness with a cause, something that alexithymics are not very good at, which would suggest a strong negative correlation. We nevertheless anticipate that alexithymia will correlate positively with our measure of homesickness as there are less inferences associated with the presence of depressed mood and alexithymia.

Finally, in order to obtain a better understanding of the nomological network and the association with stress-induced disorders, it is necessary to know more about the association with *coping* styles and those *personality* characteristics that are considered to be important determinants of stress resistance and stress vulnerability. When scrutinizing these relations, one should not restrict oneselves to those personality attributes that are assumed to result from socialization and life experiences. In this respect, *temperament* variables, regarded as more biologically based personality features [18, 19], should also be taken into account.

In the present article, three separate studies will be reported which focus on some of the here listed research questions. Study I deals with the relation between coping, subjective health status, and alexithymia. In study II, the associations between alexithymia, homesickness (susceptibility to), personality variables, i.e. neuroticism, social inadequacy, rigidity, hostility, self-sufficiency, dominance and self-esteem, have been investigated. Finally, study III concentrates on the links between alexithymia and a particular aspect of positive affect: love. In studies II and III, also the relationship with three temperament variables, i.e., strength of excitation (SE), strength of inhibition (SI) and mobility (MO), all stemming from Pavlov's [20] work on temperament, has been explored.

Study I: Alexithymia, Coping, and Subjective Health

Method

Subjects. Participants were 131 Dutch and Belgian females who responded to a call in a women's magazine for volunteers for a study on weeping. Their age ranged from 16 to 59 years (mean = 27.9; SD = 8.0).

Measures. The following questionnaires were used: *Alexithymia* was measured by the Amsterdam Alexithymia Scale (AAS) [21, Bermond, unpubl. data]. The response format was a 5-point scale ranging from 'Very much applicable' (1) to 'Not applicable at all' (5). The 20 items of this questionnaire refer to the following five elements of alexithymia: (1) insight into one's own emotional experiences; (2) fantasies/daydreaming; (3) verbalizing emotional experiences; (4) emotional excitability, and (5) 'pensée opératoire'. The items were derived from descriptions of these elements. Factor analyses on data from 2 independent samples of psychology students (n_1 = 382 and n_2 = 458) confirmed the existence of 5 factors with highest loadings for the a priori assigned items. Cronbach alphas for the total scale were 0.70 and 0.72, respectively. The intercorrelations between the 5 factors were low (all $r < 0.22$), except for the correlation between factor 1 (Insight) and factor 3 (Verbalizing). Comparisons between three student groups (theater school, psychology, mathematics/informatics) yielded significant differences, yielding support for diagnostic validity. Lowest scores were obtained by the theater school students and highest for the mathematics/informatics students, the psychologists scoring in between [21, unpubl. data]. In the present study, the internal consistency (Cronbach's alpha) was similar in magnitude (0.70), and sufficient for considering alexithymia a single dimension.

Individual *coping styles* were assessed by the Ways of Coping Checklist (WCC) [22, 23]. This inventory measures the following seven coping styles: (1) Planful

Table 1. Mean, SD, and Pearson correlations between alexithymia and the WCC scale scores and self-reports of mental and somatic health

	WCC1	WCC2	WCC3	WCC4	WCC5	WCC6	WCC7	HPSY	EHCL	SHR
Mean	56.4	35.0	32.6	24.9	29.7	34.7	42.9	13.4	6.6	7.0
SD	8.3	7.5	9.0	6.3	7.0	6.1	6.1	8.8	4.9	1.7
r	−0.28**	0.01	0.21*	−0.26**	−0.50**	−0.13	0.08	−0.02	0.10	−0.10

WCC1 = Planful and rational actions; WCC2 = Self-blame; WCC3 = Distancing; WCC4 = Daydreams and fantasies; WCC5 = Expression of emotion/seeking social support; WCC6 = Positive thinking, personal growth, humour; WCC7 = Wishful thinking/emotionality; HPSY = mental well-being; EHCL = physical health status, SHR = subjective health rating. * $p < 0.05$, ** $p < 0.01$.

and rational actions; (2) Self-blame; (3) Distancing; (4) Daydreams and fantasies; (5) Expression of emotion/seeking social support; (6) Positive thinking, personal growth, humor; and (7) Wishful thinking/emotionality. In contrast to the original WCC, two major revisions were made. First, subjects were instructed to indicate how they respond to stressful situations, in general, rather than to a specific stressful encounter. Second, the response format was changed from 'yes – no' to a 6-point scale ranging from 'Not at all characteristic of me' (1) to 'Very characteristic of me' (6).

Health status was measured using the Experienced Health Checklist [24] which is an index of long-term physical malaise. It contains 13 dichotomous items such as 'Are you often dizzy?' and 'Do you often have an upset or tense feeling in your stomach?'. In addition, in order to assess the mental state of the subject, the PSY scale of the Dutch version of the Hopkins Symptom Checklist [25] was applied, which measures moods and cognitions associated with depression and anxiety states. Furthermore, each subject was asked to rate *subjective health status* on a scale ranging from 1 (Very poor health) to 10 (Excellent health).

Finally, a general questionnaire was designed to obtain information about *demographic variables* such as age, marital status, and medical consumption. These variables will not be dealt with in this report.

Results

The AAS mean group score was 46.7 (SD = 9.45). Table 1 represents the means and SD of the coping and health variables, and their correlation with alexithymia. Whereas the correlations with the health indices were all nonsignificant, the associations with four coping subscales were statistically significant. A positive correlation ($r = 0.21$; $p < 0.05$) was found with Distancing, whereas negative correlations were found with Planful and rational actions ($r = -0.28$; $p < 0.01$), Daydreams and fantasies ($r = -0.26$; $p < 0.05$), and Expression of emotion/seeking social support ($r = -0.50$; $p < 0.01$).

Discussion

The general pattern of findings in study I is partly consistent with theoretical expectations. This holds in particular for the associations with the coping mechanisms Daydreams and fantasies and Expression of emotion/seeking social support, because these strategies can be conceived of as key elements of the alexithymia concept. More remarkable, however, are the significant negative relation with Planful and rational actions and the positive link with Distancing. These outcomes suggest that alexithymia and active problem-focused coping mostly do not go together. Instead passive forms of coping like acquiescing in a problematic situation are preferred by high-AAS subjects. This result may be seen as partially supporting the view of Ahrens and

Deffner [26] that alexithymia should be regarded as a label for a set of (situation-specific) coping behaviors, rather than as a personality trait.

The lack of significant association with the self-reported health indices may be due to a restriction of range effect, because we had hardly any patients in our sample. The present data just indicate that in a 'healthy', i.e. nonpatient population, there is no significant association between alexithymia and subjective health status or tendency to symptom reporting as has been suggested to be characteristic of individuals scoring high on neuroticism or negative affect. This outcome seems to be in contrast with the unexpected findings reported by Bagby et al. [9], who in a student sample found relatively high correlations between alexithymia as measured by the TAS and depression and state and trait anxiety. In addition, Finnish research with 2,297 middle-aged males [27] and Canadian research by Parker et al. [28] also yielded significant correlations between alexithymia and self-reported symptoms. To what extent this failure to corroborate these findings is related to the differences in sample characteristics, culture, or employed measures remains to be established.

Study II: Alexithymia, Personality, Temperament, and Homesickness

Method

Subjects. Participants were 206 volunteers (55 males and 149 females, whereas 2 subjects had not indicated their sex; age range between 18 and 73 years). Mean ages were 45.3 (SD = 14.6) and 40.0 (SD = 14.5) for men and women, respectively. The subjects were recruited via announcements in local newspapers and a call by a regional radio station, in which persons were asked to take part in a study on stress and adaptational processes.

Measures. In addition to the AAS (see study I), the following questionnaires were utilized: (1) The S-R Homesickness Questionnaire (SRHQ) [29]. The SRHQ is a Stimulus-Response questionnaire (see Furnham and Jaspars [30] for a description and evaluation of this type of inventory) in which subjects are asked to report on 7-point scales the intensity of 14 homesickness symptoms (e.g., 'Missing home'; 'Yearning for home'; 'Having sleep problems'; etc.) for 12 different situations (e.g., 'A few days – with partner and/or family – close to home'; 'A couple of months – alone – far away from home'). In this study, a total score was obtained by summing the scores across homesickness symptoms and situations.

(2) The Dutch Personality Inventory (DPI) [31]. This 133-item questionnaire is based on the California Psychological Inventory [32] and contains seven scales: (1) Neuroticism (N); (2) Social inadequacy (SIn); (3) Rigidity (Rg); (4) Hostility (Ho); (5) Self-sufficiency (SS); (6) Dominance (Do); and (7) Self-esteem (SEs).

(3) The Pavlov Temperament Survey (PTS) [33], originally published as the Strelau Temperament Inventory – Revised. The Dutch version of the PTS [34] contains three 20-item scales for measuring the Pavlovian conceptualization of central nervous system (CNS) properties: SE, SI, and MO. SE concerns the ability to endure intense or long-lasting stimulation. SI reflects the ability to sustain a state of conditioned inhibition such as extinction, differentiation, or delay. MO is the ability of the CNS to respond adequately to continuous changes in the environment.

In addition, information was collected on sociodemographic characteristics, including sex, age, and education.

Results

Males and females differed significantly on the AAS, their respective means and SDs being 52.1 (SD = 9.1) and 45.2 (SD = 9.9), ($t_{(202)} = 4.52$, $p < 0.01$). The means and SDs of the temperament (PTS) and personality (DPI) variables and the Homesickness (HS) score as well as their Pearson correlations with alexithymia are summarized in table 2, separately for males and females. The correlations are low (except for Dominance in the case of male subjects: $r = -0.31$; $p < 0.05$), although they reach statistical significance in the female group for SE, SIn, SS, and SEs; the correla-

Table 2. Means, SD and Pearson correlations between alexithymia, temperament, personality, and homesickness, separately for males and females

		SE	SI	MO	N	SIn	RG	Ho	SS	DO	SEs	HS
Males	Mean	51.4	53.4	57.2	10.3	8.4	26.1	18.7	11.8	19.7	28.2	370.2
(n = 55)	SD	8.5	7.5	9.2	6.8	6.3	8.6	7.9	4.2	6.3	6.2	118.0
	r	0.10	0.09	−0.02	−0.20	0.20	0.10	0.05	0.19	−0.31**	0.18	0.04
Females	Mean	46.3	50.3	54.0	14.6	10.5	24.9	17.5	10.4	16.4	27.0	427.5
(n = 149)	SD	8.3	7.0	9.4	8.8	7.7	7.4	6.4	4.5	6.3	6.5	151.1
	r	0.20*	0.14	0.00	−0.03	0.17*	0.15	0.05	0.17*	−0.04	0.17*	−0.13

* $p < 0.05$, ** $p < 0.01$.

tions being 0.20, 0.17, 0.17, and 0.17 (in all cases, $p < 0.05$), respectively. HS was not associated with alexithymia. Also, the associations between alexithymia and age and educational level were not significant ($r_{alex\text{-}age} = -0.05$ and 0.15 and $r_{alex\text{-}educ} = 0.05$ and −0.11 for males and females, respectively).

Discussion

The strongest (negative) association was found between alexithymia and dominance in males. Although unpublished data of our group suggest a rather strong association between socioeconomic status (SES) and dominance, the here reported negative relationship apparently cannot be explained by SES. In the literature, controversial findings have been reported concerning the prevalence of alexithymia in the lower SES classes [1, 5, 35]. Our data also fail to reveal any clear differences in patterns of correlations between males and females. This lack of consistent findings strongly suggests that the association between SES and alexithymia is weak at best. In addition, no strong associations were found between personality and temperament variables, on the one hand, and alexithymia on the other. Nevertheless, both sets of variables include measures like hostility, self-esteem, or mobility, which previously have been associated with health status. To summarize, our results thus suggest that alexithymia should be regarded as an independent risk factor for the development of somatic and psychiatric disturbances. Such a conclusion emphasizes the importance of research on the association between alexithymia and life style, including variables like smoking and alcohol consumption, social support, etc. In addition, the relationship between alexithymia and psychobiological functioning needs further exploration.

The failure to find a significant relation between HS and alexithymia, while subjects with severe HS problems were included in the sample, suggests that this particular, reactive and reversible form of depression is less strongly associated with alexithymia than other forms of depression [3, 6]. Finally, it should be noted that our results do not correspond to the findings by Parker and his group [28] and Bagby et al. [14], who reported positive correlations between alexithymia and neuroticism, as measured by the Eysenck Personality Questionnaire and NEO-PI, respectively. However, in a recent discussion on this issue

Table 3. Pearson correlations between alexithymia and temperament variables and love experiences indices

	SE	SI	MO	PLS	Age first love	NLE	NLE-FS	Ratio 1	Ratio 2
Mean	50.4	47.9	58.3	120.3	12.2	16.3	6.6	1.2	0.30
SD	7.8	5.1	7.7	16.4	2.9	16.7	13.6	1.3	0.29
r	0.13	0.09	−0.06	−0.06	0.09	−0.14	−0.11	−0.03	−0.05

NLE = Number of love experiences; NLE–FS = number of love at first sight experiences; Ratio 1 = NLE/(current age – age first love); Ratio 2 = NLE-FS/NLE.

between two research groups [36, 37], no unanimous conclusion emerged. One may wonder to what extent sample characteristics are responsible for these differences. As already indicated in the discussion of study I, it is not possible to disentangle the relevant factors given the many different aspects in which the studies differ.

Study III: Alexithymia and Passionate Love

Methods

Subjects. The subjects represented a sample of women (n = 152) who had returned a questionnaire on love experiences in a women's magazine and who had indicated that they were willing to take part in an extended study on this topic. The participants were in the age range from 18 to 45 years (mean = 27.4; SD = 5.5).

Measures. In addition to the AAS and PTS (see studies I and II), the subjects completed the Passionate Love Scale [38]. This questionnaire taps cognitive, emotional, and behavioral indicants of 'longing for union'. Examples of items are 'Sometimes I feel I can't control my thoughts; they are obsessively on X'; 'I will love X forever'; and 'An existence without X would be dark and dismal'. Moreover, information was obtained about the age at which they had been in love for the first time, estimates of how many times they had been in love, and how many times they had experienced love at first sight. Two ratios were calculated: (1) estimated number of love experiences/(present age – age at which they were in love for the first time). This index provides an indication of how frequently one falls in love, and (2) the estimated number of experiences of love at first sight/total love experiences. This ratio reflects the uncontrollable emotional factor of falling in love.

Results

This group had a mean AAS score of 42.2 (SD = 7.95). Table 3 represents the means and SD of the temperament and love experience variables and their correlations with alexithymia. The correlations with the temperament variables are comparable with those found in study II, suggesting no clear association between both constructs. The correlations with the different love variables are equally low and nonsignificant, suggesting that the experience of positive emotions, contrary to negative emotions, is less problematic in high AAS subjects. So, the associations with the love variables were weak at best, although the data suggest that the high-AAS females indeed tend to have less experiences with falling in love. However, this relationship disappeared when being controlled for the time period between the first time of being in love and current age.

Discussion

In this study, we failed to find a clear association between alexithymia and love experiences. However, cautiousness is needed when evaluating this outcome. For it may be assumed that the women in the current sample had an above average preoccupation with love experiences, whereas women lacking love experiences or women with far less interest in this issue may not be expected to have participated. Such a selection bias could have caused a restriction of range effect, which may have obscured the actual associations between both variables. However, although the mean AAS score of this group was indeed significantly lower than those of the female participants in study I and study II, the range of this group (towards more alexithymia) was even somewhat larger. Apart from a different way of recruiting subjects, it would also be important and insightful in future studies on the relation between alexithymia and aspects of love to take into account different love styles [39]. It would be hypothesized that high- and low-AAS subjects differ considerably in their conceptualization of 'love'. Therefore, more specific and fine-grained love styles need to be considered. For instance, Hendrick and Hendrick [39] discern between Eros, more or less equivalent to passionate love, Ludus, love as a game for mutual enjoyment; Storge, a feeling of natural affection; Pragma, which conjures up notions of 'pragmatic' and 'practical'; Mania, the traditional romantic love; and, finally, Agape, which refers to selflessness and concerns about the partner's well-being and effacing oneself. It may be expected that high-AAS subjects prefer the Pragma love style to any other. Given the obvious association between love experiences and the ability to establish emotional bonds with others, a necessary condition for receiving emotional support when needed, future research should address this issue more extensively. Apart from love, other positive feelings also deserve the attention of investigators. If it turned out that the way alexithymics experience positive emotions does not differ from the way normals do, current theorizing about the alexithymia construct would need some important revision.

General Discussion

Three studies were carried out in order to obtain a better insight into the nomological network of the alexithymia concept. In a previous study [11], it was shown that alexithymia was negatively related to weeping frequency, i.e., low-AAS subjects weep more frequently than individuals high on alexithymia. In the present study, we found strong negative correlations between alexithymia and the following three coping mechanisms: (1) expression of emotions; (2) daydreams and fantasies, and (3) planful and rational actions. A positive association was found between alexithymia and distancing.

The present findings yield the picture of individuals who have serious restrictions in their coping repertoire, both concerning problem-focused coping and emotion-focused coping. Given the role of coping as an important moderating factor in the stressor-disease relationship, it may be speculated that, if these characteristics are united in one and the same individual, he/she may be at serious risk for the development of somatic or psychiatric disorders after being exposed to serious life stressors.

In contrast, the correlations with personality and temperament, although in some cases statistically significant, were low generally. Most remarkable is the significant negative correlation with Dominance in males. Previous research by Wise et al. [40] has yielded evidence indicating that alexithymia is a unique personality concept, not substantially

related to any of the so-called Big-Five personality dimensions (i.e., Extraversion/surgency, Agreeableness, Conscientiousness, Emotional stability, and Intellect/openness to experience). Recently, Bagby et al. [14] reported moderate negative correlations with the openness to experience and the Positive Emotions subscale of the Extraversion dimension. In addition, moderate positive but significant associations were found with Neuroticism. Our results support the relative independence of other personality and temperament measures. What is badly needed are studies examining the relationship between alexithymia and personality features which are hypothesized to have relevance for the development of diseases and which also focus on (non)expression of emotions, for instance, repression, type C behavior, and the tendency (not) to disclose.

Our failure to find significant associations between alexithymia and subjective health and homesickness was not anticipated. Given the results of previous work, summarized by Lesser [3] and Taylor [6], showing an association between depression and alexithymia, a positive association between alexithymia and susceptibility to homesickness was expected. It is not clear how to evaluate this negative result. Does it mean that the association with specific event-related negative psychological states is weaker than with more general trait measures? Alternatively, given the significant association with the coping measures, it is tempting to speculate that this may explain why we failed to find an association with health status; the negative associations with alexithymia may in particular manifest themselves after being exposed to stressors. A final aspect that deserves attention is the great variability in assessment instruments for depression, in particular in the amount of items reflecting disturbances in somatic functions. It could be hypothesized that the association between alexithymia and depression is dependent on the relative number of items describing somatic complaints.

The correlations between alexithymia and aspects of love experiences were also typically low and not significant. We already pointed out the importance to focus on different love styles, but similar comments can be made with respect to alexithymia. The TAS-20 [41] contains three subscales, i.e. (1) Difficulty identifying feelings and distinguishing them from the bodily sensations of emotion; (2) Difficulty describing feelings to others, and (3) an Externally orientated style of thinking. In the most recent version of the AAS, the 40-item Bermond-Vorst Alexithymia Scale, the following five subscales can be identified: (1) Insight into one's own emotional experiences; (2) Fantasies/daydreaming; (3) Verbalizing emotional experiences; (4) Emotional Excitability, and (5) Pensée opératoire. The correlations between these subscales are low to moderate [42]. Therefore, future research should concentrate on the associations of the different elements of alexithymia and somatic and mental health status. Such a detailed and fine-grained analysis can further help to increase our understanding of the role of alexithymia in the development of psychiatric and somatic dysfunctions. In addition, it may help to formulate hypotheses concerning the underlying mechanisms.

The present studies have yielded results, partially contrary to expectations and earlier findings. This holds in particular with respect to self-reported health and neuroticism. One can only speculate about possible explanations for the present discrepant findings. Given the differences in culture, further sample characteristics, and the actual instruments employed between the earlier studies and the present one, it is difficult to make any definitive conclusions.

To summarize, the present findings strongly suggest that alexithymia is relatively independent of the major temperament and personality variables. In addition, the association with the experience of positive emotions deserves further exploration. Given the present findings supporting the view that alexithymia should be considered an independent risk factor for the somatic and psychiatric diseases, the links between alexithymia and endocrine and immunological functioning deserves careful examination.

References

1 Bagby R, Taylor GJ, Ryan DP: The measurement of alexithymia: Psychometric properties of the Schalling-Sifneos Personality Scale. Compr Psychiatry 1986;27:287–294.

2 Lesser IM: A review of the alexithymia concept. Psychosom Med 1981; 43:531–543.

3 Lesser IM: Current concepts in psychiatry: Alexithymia. N Engl J Med 1985;312:690–692.

4 Neill JR, Sandifer MG: The clinical approach to alexithymia: A review. Psychosomatics 1982;23:1223–1231.

5 Parker JDA, Taylor GJ, Bagby RM: The alexithymia construct: Relationship with sociodemographic variables and intelligence. Compr Psychiatry 1989;30:434–441.

6 Taylor GJ: Alexithymia: Concept, measurement and implications for treatment. Am J Psychiatry 1984; 141:725–732.

7 Taylor GJ: Alexithymia: Culture and class relationships. Transcult Psychiatr Res Rev 1987;24:85–95.

8 Taylor GJ, Bagby RM, Parker JDA: The alexithymia construct. A potential paradigm for psychosomatic medicine. Psychosomatics 1991;32: 153–164.

9 Bagby RM, Taylor GJ, Ryan D: Toronto Alexithymia Scale: Relationship with personality and psychopathology measures. Psychother Psychosom 1986;45:207–215.

10 Lolas F, Von Rad M: Alexithymia: in Cheren S (ed): Psychosomatic Medicine: Theory, Physiology, and Practice. Madison, International Universities Press, vol 1, pp 189–237.

11 Vingerhoets AJJM, Van den Berg MP, Kortekaas RThJ, Van Heck GL, Croon MA: Weeping: Associations with personality, coping, and subjective health status. Pers Individ Diff 1993;14:185–190.

12 McDonald PW, Prkachin KM: The expression and perception of facial emotion in alexithymia: A pilot study. Psychosom Med 1990;52: 199–210.

13 Parker JDA, Taylor GJ, Bagby RM: Alexithymia and the recognition of facial expressions of emotion. Psychother Psychosom 1993;59:197–202.

14 Bagby RM, Taylor GJ, Parker JDA: The twenty-item Toronto Alexithymia Scale-II. Convergent, discriminant, and concurrent validity. J Psychosom Res 1994;38:33–40.

15 Prince JD, Berenbaum H: Alexithymia and hedonic capacity. J Res Pers 1993;27:15–22.

16 Vingerhoets AJJM, Van Heck GL, Gruijters I, Thijs H, Voolstra A: Heimwee. Een literatuuroverzicht. Gedrag Gezondh 1993;21:227–237.

17 Van Tilburg MAL, Vingerhoets AJJM, Van Heck GL: Homesickness: A review of the literature, submitted.

18 Strelau J: Temperament-Personality-Activity. London, Academic Press, 1983.

19 Strelau J: The concept of temperament in personality research. Eur J Pers 1987;1:107–117.

20 Pavlov IP: Complete Works, ed 2. Moscow, USSR Academy of Sciences, 1951–1952.

21 Bermond B, Vorst H, Gerritsen W, Vingerhoets AJJM: Psychometric properties of the Amsterdam Alexithymia Scale, in preparation.

22 Aldwin C, Folkman S, Schaefer C, Coyne JC, Lazarus RS: Ways of Coping: A process measure. Paper presented at the Meeting of the American Psychological Association, Los Angeles, 1980.

23 Van Heck GL, Vingerhoets AJJM: Copingstijlen en persoonlijkheidskenmerken. Ned Tijdschr Psychol 1989;44:73–87.

24 Dirken J: Arbeid en Stress. Groningen, Wolters-Noordhoff, 1969.

25 Luteijn F, Hamel LF, Bouwman TK, Kok AR: HSCL Hopkins Symptom Checklist (Manual). Lisse, Swets & Zeitlinger, 1984.

26 Ahrens D, Deffner G: Empirical study of alexithymia: Methodology and results. Am J Psychother 1986; 40:430–447.

27 Kauhanen J, Julkunen J, Salonen JT: Alexithymia and perceived symptoms: Criterion validity of the Toronto Alexithymia Scale. Psychother Psychosom 1991;56:247–252.

28 Parker JDA, Bagby RM, Taylor GJ: Toronto Alexithymia Scale, EPQ and self-report measures of somatic complaints. Pers Individ Diff 1989; 10:599–604.

29 Van Heck GL, Vingerhoets AJJM, Gruijters I, Thijs H, Voolstra A, Van Tilburg MAL: Homesickness: Relationship with temperament and personality, in preparation.

30 Furnham A, Jaspars J: The evidence for interactionism in psychology. A critical analysis of the stimulus-response inventories. Pers Individ Diff 1983;4:627–644.

31 Luteijn F, Starren J, Van Dijk J: Handleiding bij de NPV (Herziene uitgave). Lisse, Swets & Zeitlinger, 1985.

32 Gough HG: Manual for the California Psychological Inventory. Palo Alto, Conservation Press, 1964.
33 Strelau J, Angleitner A, Bantelmann J, Ruch W: The Strelau Temperament Inventory-Revised (STI-R): Theoretical considerations and scale development. Eur J Pers 1990;4: 209–235.
34 Van Heck GL, De Raad B, Vingerhoets AJJM: De Pavlov Temperament Schaal: Theoretische achtergrond en schaalconstructie. Ned Tijdschr Psychol 1993;48:141–142.
35 Smith GR: Alexithymia in medical patients referred to a consultation/liaison service. Am J Psychiatry 1983;140:99–101.
36 Taylor GJ, Bagby RM, Parker JDA: Is alexithymia a non-neurotic personality dimension? A response to Rubino, Grasso, Sonnino & Pezzarossa. Br J Med Psychol 1993;66: 281–287.
37 Rubino IA: Is alexithymia a non-neurotic personality dimension? A counter-response to Taylor, Bagby & Parker. Br J Med Psychol 1993;66: 289–294.
38 Hatfield E, Sprecher S: Measuring passionate love in intimate relations. J Adolesc 1986;9:383–410.
39 Hendrick SS, Hendrick C: Romantic love. Newbury Park, Sage, 1992.
40 Wise TN, Mann LS, Shay L: Alexithymia and the five-factor model of personality. Compr Psychiatry 1992;33:147–151.
41 Parker JDA, Bagby RM, Taylor GJ, Endler NS, Schmitz P: Factorial validity of the 20-item Toronto Alexithymia Scale. Eur J Pers 1993;7: 221–232.
42 Bermond B: The Bermond-Vorst Alexithymia Scale: First findings. Paper presented at the Joint Meeting of the Dutch Behavioral Factors in Somatic Diseases and Health Psychology Working Groups, Lunteren, 1993.